

III. electrically connecting said microelectronic elements and said leads;

IV. folding said flexible substrate and stacking at least some of said microelectronic elements in substantially vertical alignment with one another; and

V. maintaining said stacked microelectronic elements in said substantially vertical alignment, wherein said assembling and folding steps are performed so that after said folding step said conductive terminals are exposed at a bottom end of said stacked assembly and said test contacts are exposed on said stacked assembly remote from said bottom end.

5. (AMENDED) The method of claim 2, further comprising the step of

disposing a spacer between two adjacent microelectronic elements.

8. (AMENDED) A method of making a microelectronic assembly, comprising the steps of:

I. providing a flexible substrate have at least one attachment site, said flexible substrate including a first surface and a second surface and having a plurality of electrically conductive terminals accessible at at least one of said first and second surfaces; electrically conductive test contacts accessible at at least one of said first and second surfaces; and wiring connected to said terminals and said test contacts, said wiring including flexible leads extending to said at least one attachment site;

II. assembling a microelectronic element to said attachment site;

III. electrically connecting said microelectronic element to said leads;

IV. folding said flexible substrate into a folded configuration having a folded portion; and

V. maintaining said flexible substrate in said folded configuration, said microelectronic element in said folded configurations;

VI. wherein said assembling and folding steps are performed so that after said folding step, said conductive terminals are exposed at a bottom end of said microelectronic assembly and said test contacts are exposed at a top end of said microelectronic assembly.

9. (AMENDED) A method of making a stacked microelectronic assembly comprising:

providing a flexible substrate including a first surface, a second surface opposite said first surface, first electrical contacts accessible at at least one of said first and second surfaces, second electrical contacts accessible at at least one of said first and second surfaces, wiring connected to said first and second electrical contacts,;

assembling first and second microelectronic elements to said flexible substrate and electrically connecting said microelectronic elements to said wiring; and then

folding said flexible substrate into a folded configuration,

said assembling and folding steps being performed so that after said assembling and folding steps said first electrical contacts are accessible at a bottom end of said microelectronic assembly and said second electrical contacts are accessible at a top end of said microelectronic assembly and said first and second microelectronic elements are disposed between said top and bottom ends.

15. (AMENDED) A method of making a microelectronic assembly, comprising the steps of:

providing a flexible substrate including a first surface and a second surface and having a plurality of first electrical

contacts accessible at at least one of said first and second surfaces, second electrical contacts accessible at at least one of said first and second surfaces, and wiring connected to said first and second electrical contacts;

assembling a first microelectronic element to said flexible substrate and electrically connecting said microelectronic element to said wiring; and then

folding said flexible substrate into a folded configuration, said assembling and folding steps being performed so that after said assembling and folding steps said first electrical contacts are exposed at a bottom end of said microelectronic assembly and said second electrical contacts are exposed at a top end of said microelectronic assembly, and said first microelectronic element is disposed between said top and bottom ends.

20. (AMENDED) The method as claimed in claim 15, further comprising:

attaching a second microelectronic element to said flexible substrate; and

vertically aligning the first and second microelectronic elements with one another during the folding step.

Insert new claims 21-33, as follows:

21. (New) The method as claimed in claim 15 wherein said attaching and folding steps are performed so that at least some of said first electrical contacts are aligned with said first microelectronic element.

22. (New) The method as claimed in claim 21 wherein said attaching and folding steps are performed so that at least some of said second electrical contacts are aligned with said first microelectronic element.

23. (New) The method as claimed in claim 22 wherein said first microelectronic element is the only microelectronic element attached to said substrate prior to said folding step.

24. (New) The method as claimed in claim 22 further comprising mounting said microelectronic assembly to a circuit board so that said bottom end faces said circuit board and said top end faces upwardly away from said circuit board, so that said second electrical contacts remain exposed at said top end after said mounting step.

25. (New) The method as claim 15 further comprising making an electrical connection to said second electrical contacts after said folding step.

26. (New) The method as claimed in claim 25 wherein said step of making an electrical connection to said second electrical contacts includes making a test connection to said second electrical contacts.

27. (New) The method as claimed in claim 25 further comprising the step of mounting another microelectronic assembly to said top end of the first-said microelectronic assembly after said folding step and wherein said step of making an electrical connection to said second electrical contacts includes connecting said another microelectronic assembly to said second electrical contacts.

28. (New) The method as claim 9 further comprising making an electrical connection to said second electrical contacts after said folding step.

29. (New) The method as claimed in claim 28 wherein said step of making an electrical connection to said second electrical contacts includes making a test connection to said second electrical contacts.

30. (New) The method as claimed in claim 28 further comprising the step of mounting another microelectronic assembly to said top end of the first-said microelectronic assembly after said folding step and wherein said step of making an electrical connection to said second electrical contacts includes connecting said another microelectronic assembly to said second electrical contacts.

31. (New) The method as claimed in claim 9 further comprising mounting said microelectronic assembly to a circuit board so that said bottom end faces said circuit board and said top end faces upwardly away from said circuit board, so that said second electrical contacts remain exposed at said top end after said mounting step.

32. (New) The method as claimed in claim 9 wherein said attaching and folding steps are performed so that said first and second microelectronic elements are aligned with one another in said microelectronic assembly.

33. (New) The method as claimed in claim 28 wherein said attaching and folding steps are performed so that at least some of said first electrical contacts and at least some of said second electrical contacts are aligned with said microelectronic elements.